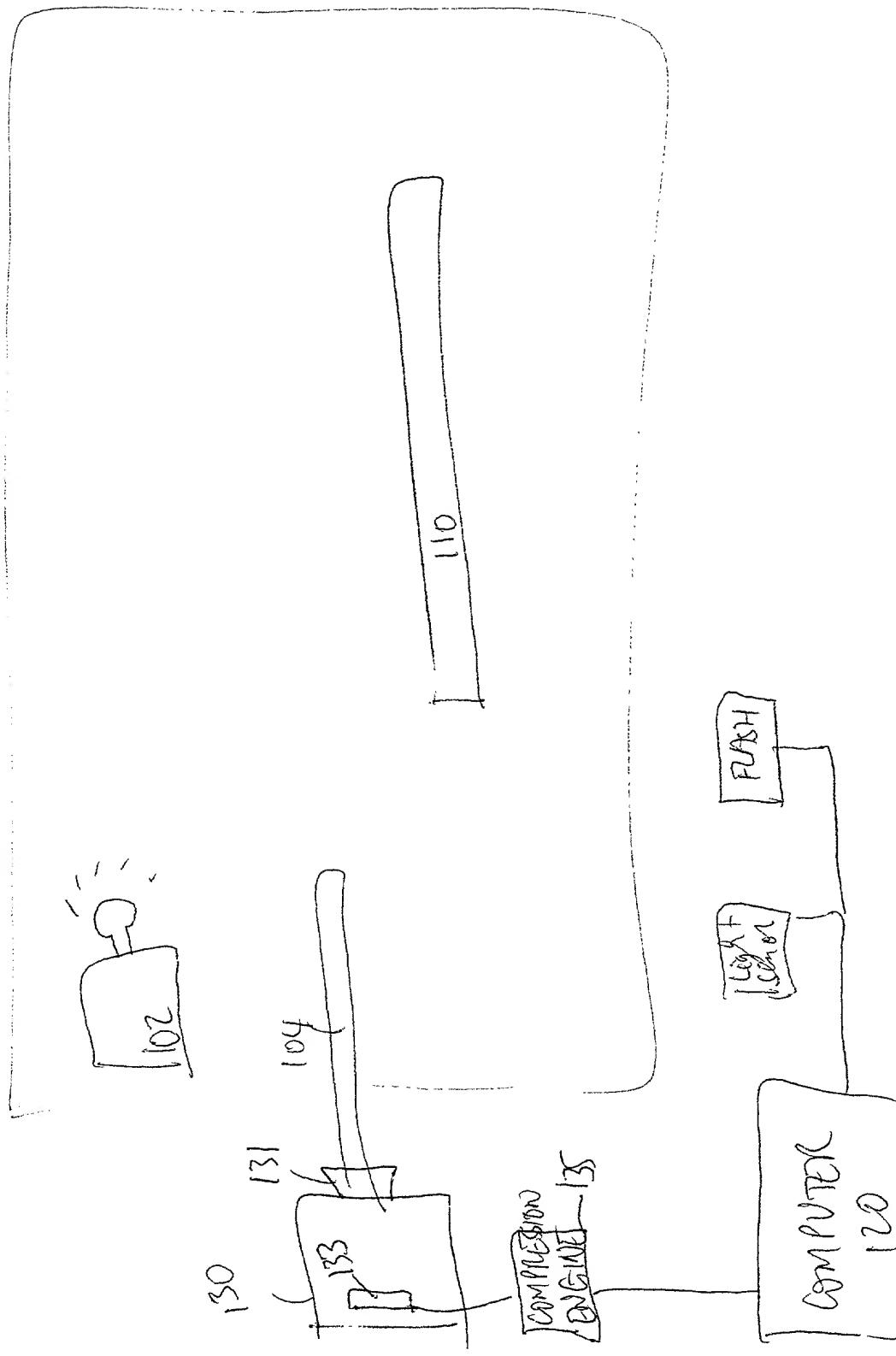
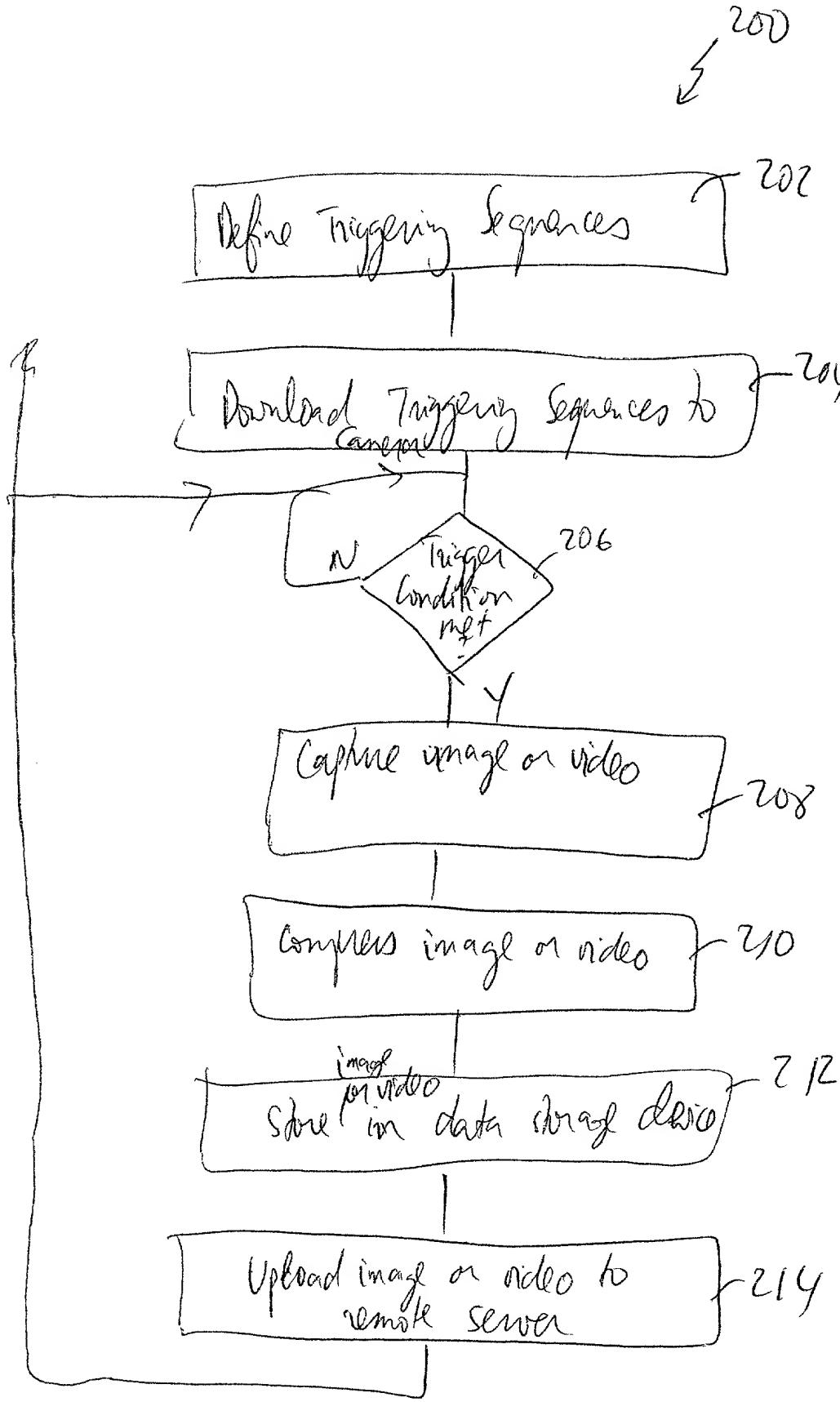
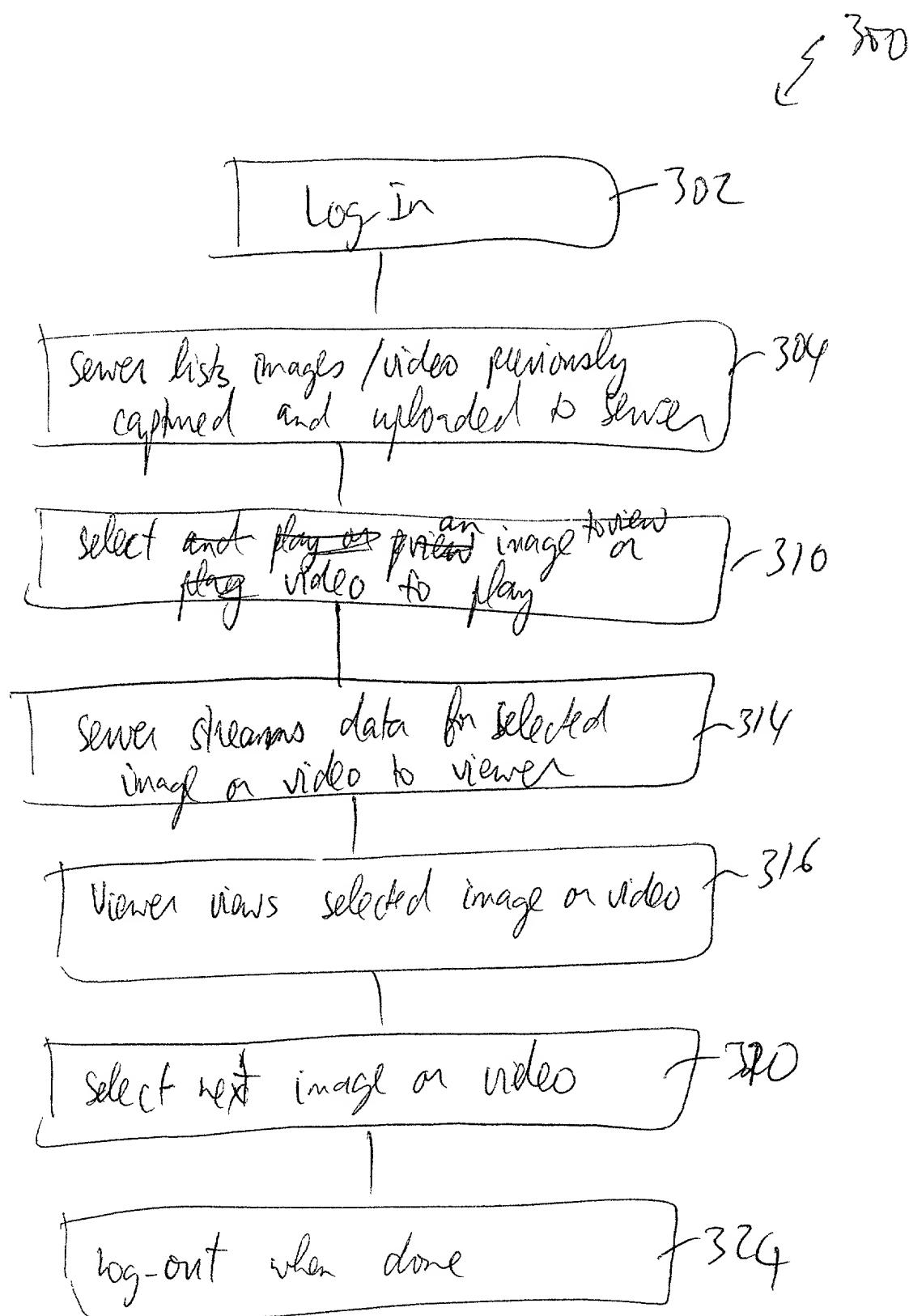


Fig. 1





F. 2



F. 3

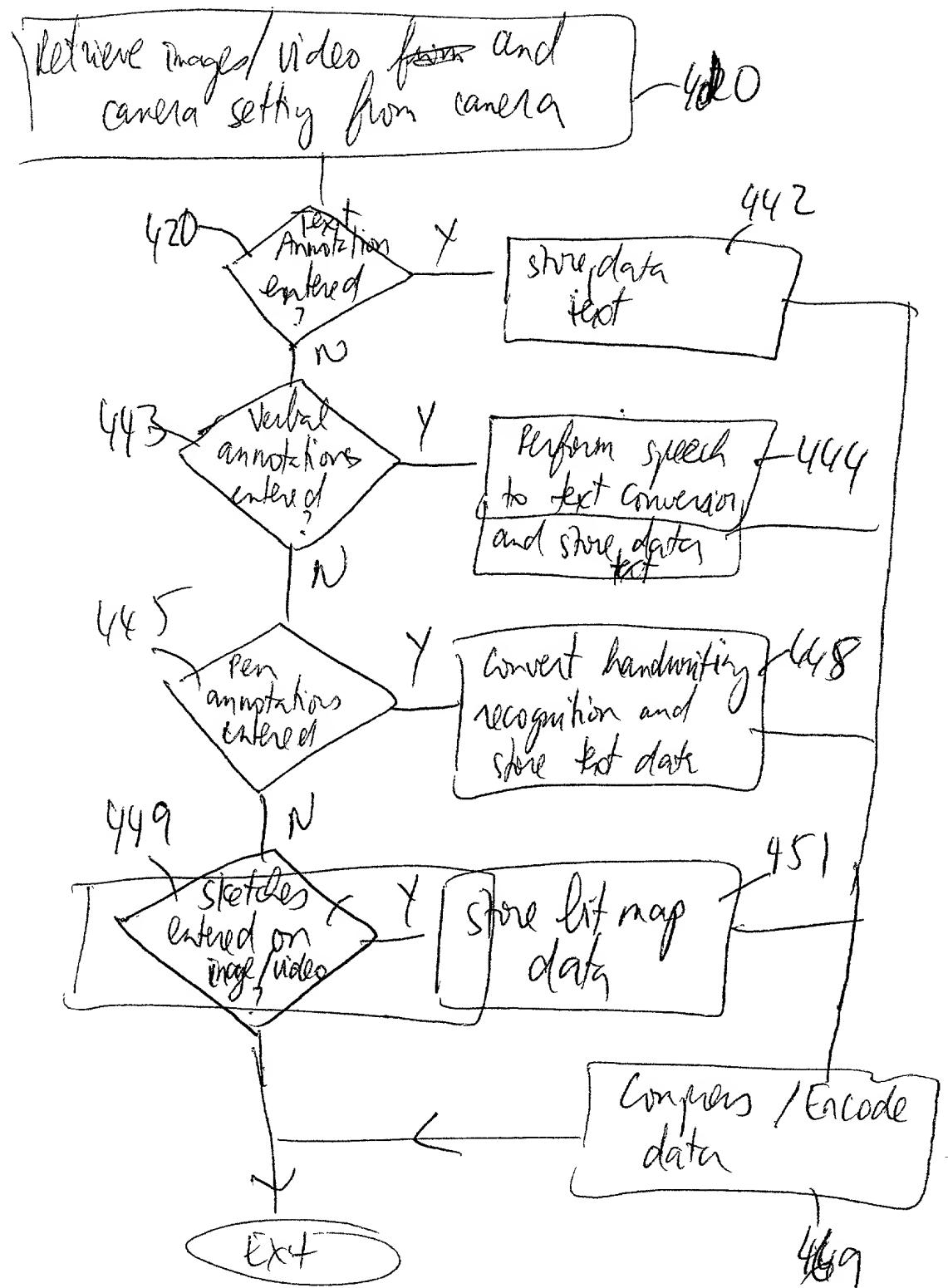


Fig. 4

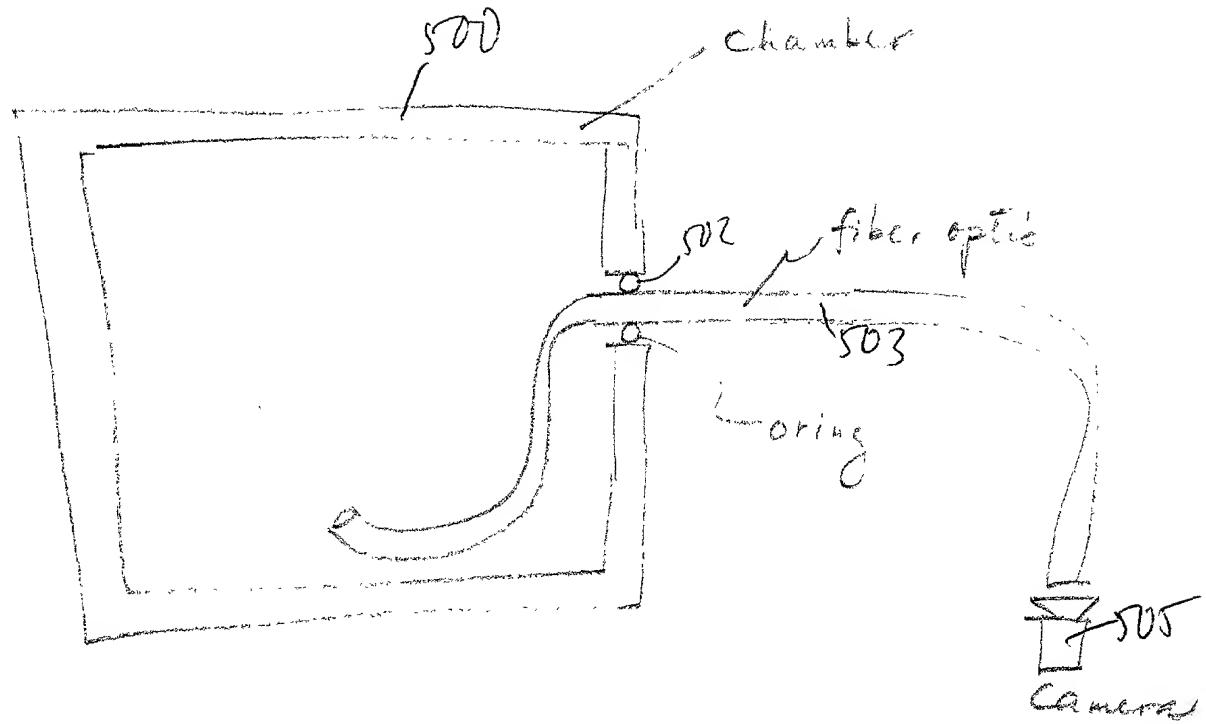
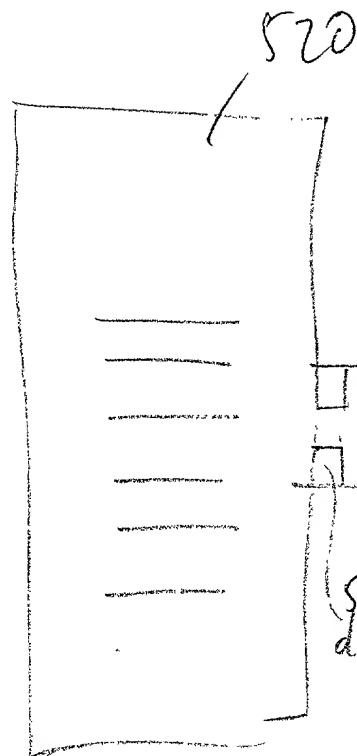


Fig 5

Vacuum adapter for viewing inside the
chamber



522 video camera to see if wafer slide off the arm and block the door
 - see if wafer & arm is aligned properly

Fig 6

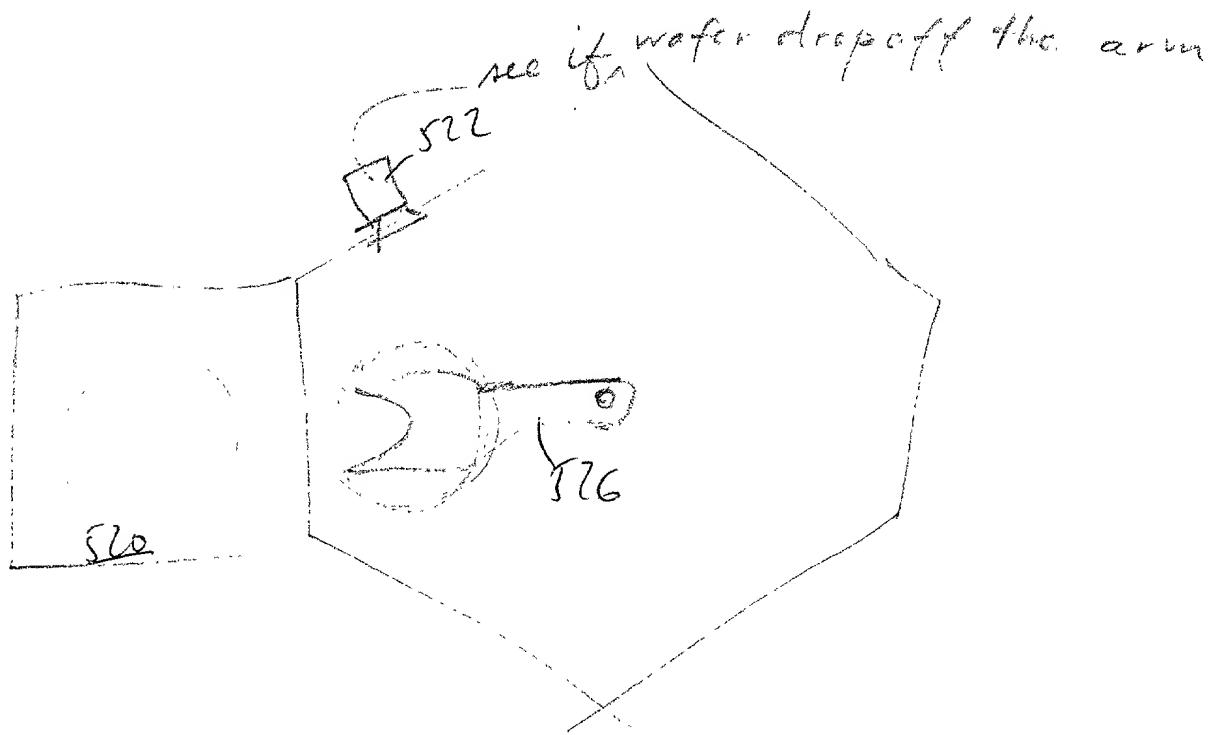


Fig 57

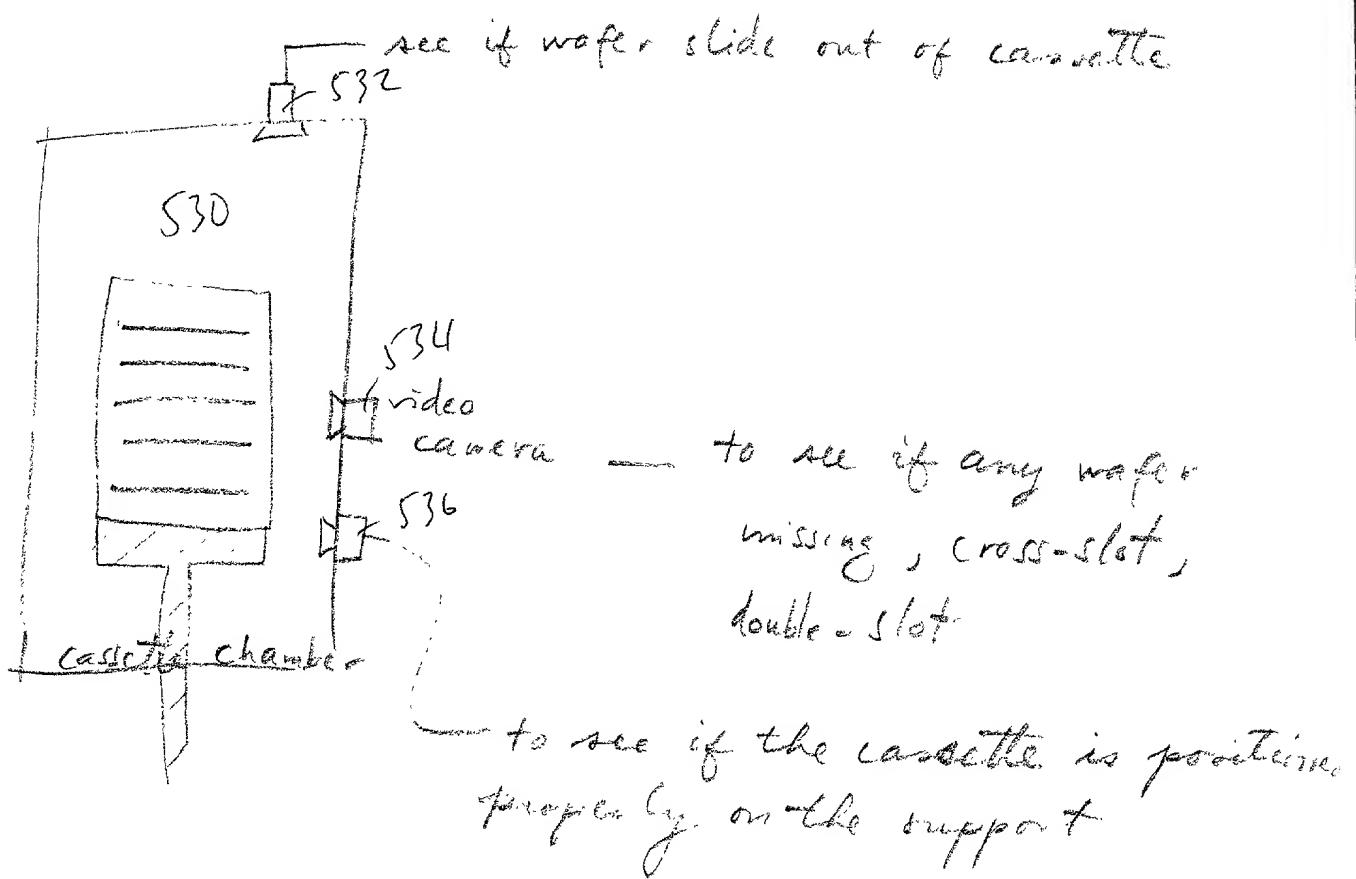


Fig 8

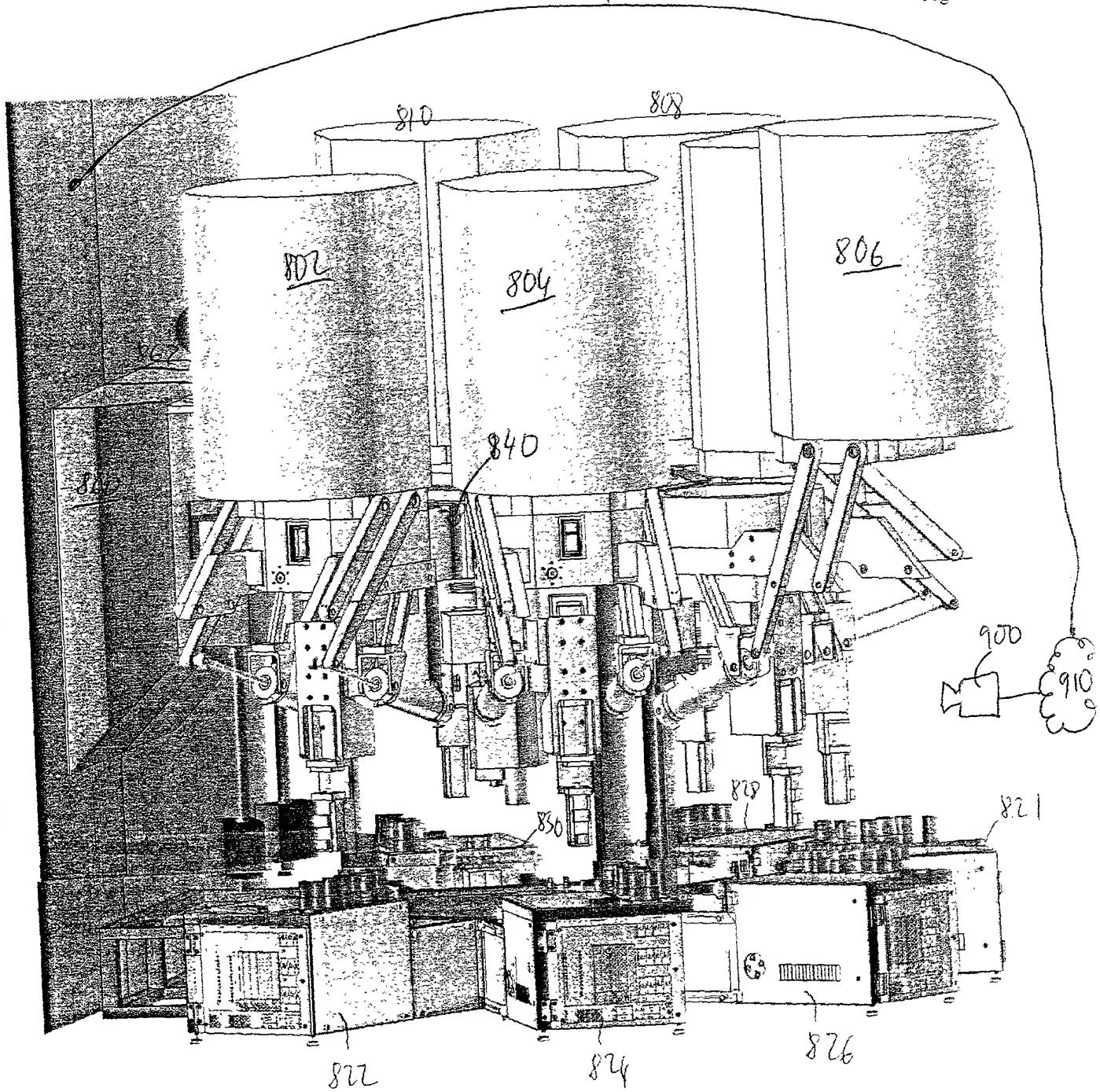


FIG. 9